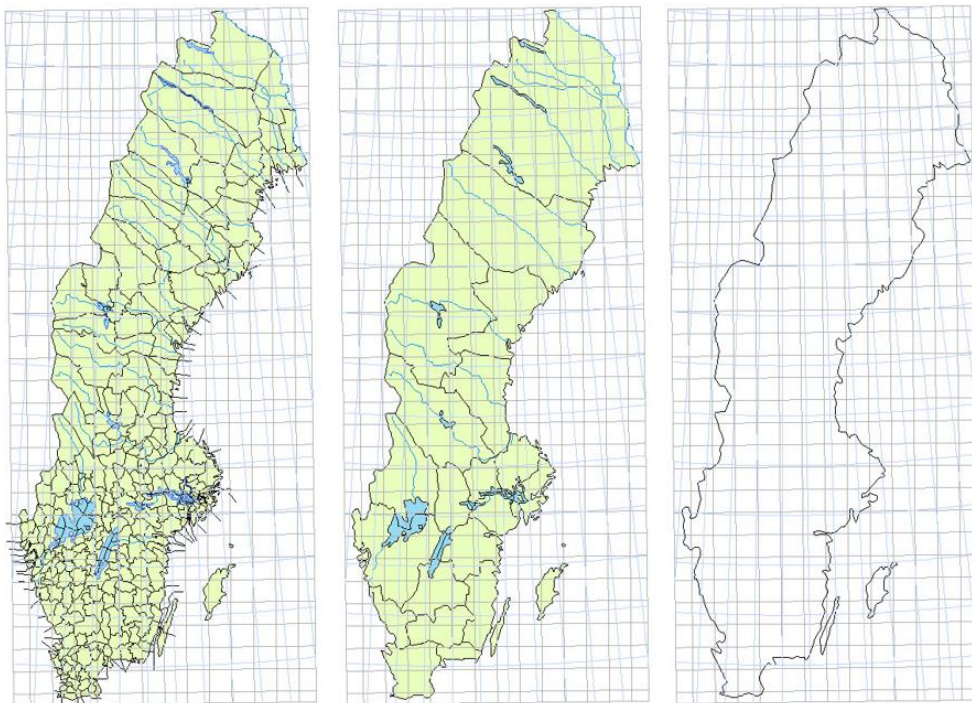


**PRODUCT DESCRIPTION**

# GSD-Maps of Sweden at the scales of 1:5 million, 1:10 million and 1:20 million

DOCUMENT VERSION: 2.2

*Figure 1. GSD-Sweden maps scale 1: 5 million, 1:10 million and 1:20 million.*



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## I General description

The maps of Sweden are created in scales of 1:5 million, 1:10 million, and 1:20 million with the intention of serving as a simple base map for various thematic presentations. The databases have varying levels of detail and are intended to provide a good cartographic representation of Sweden in different scale ranges. They belong to the information that Lantmäteriet provides without a licensing fee as open data. This document describes how the products GSD-Sweden Maps 1:5 million, 1:10 million, and 1:20 million, vector, are structured upon delivery.

### I.1 Contents

The objects in the databases are selected to provide a good cartographic representation.

Due to differences in the degree of generalisation and purpose, the content at the different scales varies:

*Table 1. Contents in each scale.*

	<b>1:5 million</b>	<b>1:10 million</b>	<b>1:20 million</b>
National boundary and coastline	X	X	X
Lakes and islands	X	X	
Watercourses	X	X	
Municipality boundary	X		
County boundary	X	X	
The Arctic Circle	X	X	X
Grid and graticule	X	X	X

## 1.2 Geographic coverage

The bases cover the entire Sweden, with the following approximate coordinates:

*Table 2. Distribution with coordinates for the maps of Sweden.*

<b>E-min</b>	263 000
<b>E-max</b>	919 000
<b>N-min</b>	6 118 000
<b>N-max</b>	7 677 000

## 1.3 Coordinate system

Plane: SWEREF 99 TM

Height: RH 2000

## 2 Quality description

The quality description aims to provide information about the quality of stored objects. Based on the measurement method, an expected positional accuracy has been assigned to the objects included in the map of Sweden.

For more information about the various quality parameters used in the product description, refer to [HMK Ordlista \(pdf, in Swedish\)](#) and [HMK Geodatatäkningskvalitet \(pdf, in Swedish\)](#). For terms and definitions of these, refer to [term-databasen Ekvator](#).

### 2.1 Purpose and utility

The products are excellent for use as base maps and for various types of thematic presentations. They are available in scales of 1:5,000,000, 1:10,000,000, and 1:20,000,000. The content is tailored to the scale to provide a good cartographic representation.

The vector format allows you to tailor the map to customize the map to your own business needs.

You can:

- add and link your own information to objects on the map.
- integrate map information in your own system.
- display information as required using the layer division.

### 2.2 Data capture

#### 2.2.1 LINAGE

In connection with the production of the first volume of Sweden's National Atlas 1987–1989, several databases for Sweden Maps were produced.

Lantmäteriet's Map of Sweden in 1:1 million scale has been rescaled to 1:2.5 million and copied onto engraving plates. During the engraving, manual generalization was performed.

Subsequently, three more reductions were made onto engraving plates. First to 1:5 million, then to 1:10 million, and finally to 1:20 million. Manual generalization was carried out in all engravings.

The databases are scanned, except for the layers of the grid and lattice, which were produced using calculation programs.

## 2.3 Maintenance

### 2.3.1 MAINTENANCE FREQUENCY

The maps of Sweden are updated, when necessary, but can in principle be considered as static products.

## 2.4 Data quality

### 2.4.1 COMPLETENESS

Territorial waters boundary is not included. Therefore, there are no outer boundaries for counties/municipalities facing the Baltic Sea, Kattegat, and Skagerrak.

There are certain generalization rules for the information in Maps of Sweden. Cartographic generalization involves simplifying, symbolizing, and re-locating geographic information from its original location to create the clearest and most readable map representation possible. Therefore, generalization may result in the geographic information not always being presented to scale and position accuracy, and deviations in completeness may occur when objects are generalized for space reasons.

### 2.4.2 LOGICAL CONSISTENCY

Administrative boundaries are a line layer that does not form closed areas. Polygon layers for land and water form closed shapes. Line objects are not always mathematically accurate.

### 2.4.3 THEMATIC ACCURACY

The thematic accuracy is high.

### 2.4.4 POSITIONAL ACCURACY

Positional accuracy describes how well a given position corresponds to the actual position in the terrain.

Due to cartographic generalizations and the scale range, positional accuracy is low.

### 3 Contents of the delivery

#### 3.1 File sets

The data size for the map of Sweden in a scale of 1:5 million is approximately 0.53 MB, in a scale of 1:10 million is about 0.34 MB, and in a scale of 1:20 million is approximately 0.21 MB.

##### 3.1.1 SHAPE FORMAT

Data in Shape format is delivered in 4 files per layer:

*Table 3. List of files available for the shape format.*

<b>*.shp</b>	Geometry file.
<b>*.dbf</b>	Attribute file in Dbase format.
<b>*.shx</b>	Index file.
<b>*.prj</b>	Projection file.

Geometry index is not created for shape files.

Attribute index is not created for the Dbase files.

##### 3.1.2 MAPINFO FORMAT

Data in MapInfo (tab) format is delivered in 4 files per layer:

*Table 4. List of files available for the MapInfo format.*

<b>*.tab</b>	Main file/Table definitions.
<b>*.dat</b>	Attribute file.
<b>*.map</b>	Geometry file.
<b>*.id</b>	Index file for graphical features.

The tab files do not have geometry or attribute indexes.

## 4 Layer description and code list

### 4.1 GSD-Map of Sweden 1:5 million

#### 4.1.1 GRANS5L LINE LAYER WITH ADMINISTRATIVE BOUNDARIES

Contains municipality and county boundaries. The boundaries are not closed with territorial waters boundary or national boundary.

*Table 5. Contents in grans5l line layer with administrative boundaries.*

KKOD	Description
12	County boundary
13	Municipality boundary

*Table 6. Set of attributes for grans5l line layer with administrative boundaries.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

#### 4.1.2 LAND5Y POLYGON LAYER WITH LAND AND LAKES

Contains land areas and lakes as well as islands in lakes and seas.

*Table 7. Contents in land5y polygon layer with land and lakes.*

KKOD	Description
901	Land
902	Lake

*Table 8. Set of attributes in land5y polygon layer with land and lakes.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

#### 4.1.3 VDRAG5L LINE LAYER WITH WATERCOURSES

Contains the largest watercourses.

*Table 9. Contents in vdrag5l line layer with watercourses.*

KKOD	Description
4	Watercourse

*Table 10. Set of attributes in vdrag5l line layer with watercourses.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

#### 4.1.4 LAND5L LINE LAYER WITH LAND CONTOURS

Contains land contours such as coastline, lakes, and islands as well as national boundary.

*Table 11. Contents in land5l line layer with land contours.*

KKOD	Description
1	Coastline
2	Lake shoreline
3	Island shoreline
9	National boundary

*Table 12. Set of attributes in hland5l line layer with land contours.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code



## 4.2 GSD-Map of Sweden 1:10 million

### 4.2.1 GRANS10L LINE LAYER WITH COUNTY BOUNDARIES

Contains county boundaries.

*Table 13. Contents in grans10l line layer with county boundaries.*

KKOD	Description
12	County boundary

*Table 14. Set of attributes in grans10l line layer with county boundaries.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

### 4.2.2 LAND10L LINE LAYER WITH LAND CONTOURS

Contains land contours such as coastline, lakes, and islands as well as national boundary.

*Table 15. Contents in land10l line layer with land contours.*

KKOD	Description
1	Coastline
2	Lake shoreline
3	Island shoreline
9	National boundary

*Table 16. Set of attributes in land10l line layer with land contours.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

#### 4.2.3 VDRAG10L LINE LAYER WITH WATERCOURSES

Contains the largest watercourses.

*Table 17. Contents in vdrag10l line layer with watercourses.*

KKOD	Description
4	Watercourse

*Table 18. Set of attributes in vdrag10l line layer with watercourses.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

#### 4.2.4 LAND10Y POLYGON LAYER WITH LAND AND LAKES

Contains land areas and lakes as well as islands in lakes and seas.

*Table 19. Contents in land10y polygon layer with land and lakes.*

KKOD	Description
901	Land
902	Lake

*Table 20. Set of attributes in land10y polygon layer with land and lakes.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	30	Text	30	Category code

### 4.3 GSD- Map of Sweden 1:20 million

#### 4.3.1 LAND20L LINE LAYER WITH LAND CONTOURS

Contains land contours such as coastline and national boundary.

*Table 21. Contents in land20l line layer with land contours.*

<b>KKOD</b>	<b>Description</b>
1	Coastline and national boundary

*Table 22. Set of attributes in land20l line layer with land contours.*

<b>No.</b>	<b>Attribute</b>	<b>Type shape</b>	<b>Length shape</b>	<b>Type MapInfo</b>	<b>Length MapInfo</b>	<b>Description</b>
1	KKOD	Text	30	Text	30	Category code

#### 4.3.2 LAND20Y POLYGON LAYER WITH LAND

Contains land areas.

*Table 23. Contents in land20y polygon layer with land.*

<b>KKOD</b>	<b>Description</b>
901	Land

*Table 24. Set of attributes in land20y polygon layer with land.*

<b>No.</b>	<b>Attribute</b>	<b>Type shape</b>	<b>Length shape</b>	<b>Type MapInfo</b>	<b>Length MapInfo</b>	<b>Description</b>
1	KKOD	Text	30	Text	30	Category code

## 4.4 All products in this document

### 4.4.1 GRADNAT LINE LAYER WITH DEGREE LINE AND THE ARCTIC CIRCLE

Contains the Arctic Circle as well as the geographic graticule.

*Table 25. Contents in gradnat line layer with degree line and the arctic circle.*

KKOD	Description
14	Degree line (not even 5)
15	Degree line (even 5)
16	The Arctic Circle

*Table 26. Set of attributes in gradnat line layer with degree line and arctic circle.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	10	Text	10	Category code

### 4.4.2 RUTNAT LINE LAYER WITH GRID

Contains the national grid with frame.

*Table 27. Contents in rutnat line layer with grid.*

KKOD	Description
17	Grid
18	Frame

*Table 28. Set of attributes in rutnat line layer with grid.*

No.	Attribute	Type shape	Length shape	Type MapInfo	Length MapInfo	Description
1	KKOD	Text	10	Text	10	Category code